

D1000.R Lot No. 2310100

Beagle Dog Kidney Microsomes
 Untreated, Male, Pool of 3
 0.5 mL at 10 mg protein / mL
 Suspension medium: 250 mM sucrose

Enzyme Activities		Rate
NADPH-cytochrome c reductase	(nmol/mg protein/min)	22.5 ± 1.2
Lauric acid 12-hydroxylation	(pmol/mg protein/min)	1310 ± 170
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	<1.0

Values for enzyme activities were determined at a single substrate concentration and are mean ± standard deviation of three or more determinations.

To measure cytochrome P450 (CYP) activity, kidney microsome samples (0.1 mg/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), containing MgCl₂ (3.0 mM), EDTA (1.0 mM), NADP (1.0 mM), glucose-6-phosphate (5.0 mM), glucose-6-phosphate dehydrogenase (1 Unit/mL) and lauric acid (100 µM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

To measure UDP-glucuronosyltransferase (UGT) activity, kidney microsome samples (0.2 mg/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in Tris-HCl (100 mM, pH 7.7 at 37°C), CHAPS (0.5 mM), EDTA (1.0 mM), MgCl₂ (10 mM), D-saccharic acid 1,4-lactone (100 µM), uridine diphosphate-glucuronic acid (8.0 mM) and 4-methylumbelliferone (1 mM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

Subcellular fractions were prepared from whole kidney.

Animal Information

Species: Dog; *Canis familiaris*
 Strain: Beagle
 Sex: Male
 Age: > 6 months
 Vendor: Envigo, Cumberland, VA; Aptuit, Stilwell, KS

Animals were housed in an AAALAC-accredited facility and allowed to acclimate ≥ seven days before use.

Food: Nutrena (*ad libitum*)
 Water: Automatic watering system, tap water (*ad libitum*)
 Light/dark cycle: Not monitored
 Temperature: Ranges from 62°-82°F
 Humidity: Not monitored
 Cage: Indoor/outdoor run cages, plastic coated rod bottom, sanitized at least every 2 weeks



Store at -80°C

CAUTION: This sample should be considered as a potential biohazard and universal precautions should be followed. Intended for *in vitro* use only.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.

This data sheet serves as a Certificate of Analysis and has been approved by Stephanie Helmstetter, Assistant Director.
 Signature and Date: Stephanie Helmstetter 18 April 2023